

DESCRIPTIONS OF AUSTRALIAN BIRDS' EGGS.

BY DR. E. PIERSON RAMSAY, F.R.S.E, M.R.I.A., &c.

(Plate XIX., figs. 1-3, 5 and 6.)

At the request of several of my friends in the country, who are interested in Australian Oology, but have not access to collections containing authentic specimens of eggs, I beg to submit the following descriptions of such as are rare, or, in my own opinion, have been imperfectly or incorrectly described.

ASTUR RADIATUS, *Lath.*

I take the following description from my note book, under date October 11th, 1884, p. 25.

'The egg of *Astur radiatus*, just received from Mr. Barnard, of Coomooboolaroo, in the Dawson River District, Queensland, is much like a large egg of *Astur approximans* or that of *Aquila morphnoides*. It is of a dull white, roundish, with a few blackish brown smears and blotches, and irregular markings and dots of a slightly darker shade; the shell is slightly rough. Length 2·2 inches, diameter 1·8 inches.' (No. 147).

ASTUR APPROXIMANS, *Vig. and Horsf.*

The eggs in set No. A, are of a long narrow oval; colour dull white, smeared with yellowish-buff; length 1·74 inches by 1·3, inches. A second set, No. B, show smears to a less extent, and there are a few scattered spots of a deep reddish-brown; form a round-oval. Length 1·75 inches × 1·4 inches in breadth. (*Note-book*, 1880-1, p. 5.)

HALIASTUR SPHENURUS, *Vieill.*

Egg roundish, white, with a slightly bluish tinge on the inner surface of the shell, with numerous dots, a few spots and

irregular markings of dull yellowish-brown. The shape of some specimens is a true oval, equal at both ends, but swollen in the centre. Length 2·15 inches \times 1·8 inches in breadth. (*Note-book*, 1882, p. 33.)

FALCO SUBNIGER, *Gould*.

It is through Mr. K. H. Bennett's exertions and liberality that I am enabled to describe the eggs of this rare species, taken by himself on the 27th of September, 1884. There were four laid for a sitting, which closely resemble large specimens of the Merlin's, and are not unlike finely freckled eggs of *Hieracidea*, but of a richer or brighter red, the ground-colour being obscured with rich reddish dots and freckles all over the surface; in some these dots form confluent markings on one end of the egg, or patches on the side; they are almost identical in colour and shape with those of *F. hypoleucus*, but larger; the shell is of finer grain than is shown in those of the *Hieracideas*. In form they are almost true ovals being but slightly swollen at the thicker end; one is rather elongate in form. Length (A) 2·1 \times 1·6 inches; (B) 2·13 \times 1·58 inches; (C) 2·18 \times 1·55 inches.

STRIX CANDIDA, *Tickell*.

I am indebted to my friend Mr. A. J. Boyd for a set of the eggs of this species taken in the Herbert District, Queensland; like those of all others of the genus, they are white, but have a slight bluish tinge; in form oval, rather swollen about the centres; length (A) 1·68 inches \times 1·25 inches in breadth; (B) 1·7 inches \times 1·25 inches.

EUROSTOPODUS ALBOGULARIS, *V.* and *H.*

Having recently received from Mr. A. Clark a very fine specimen of the egg of this species, which differs in size and colour from all I have before examined, I cannot let the occasion slip by without describing so fine a specimen. The eggs taken at Gootchy by Mr. D. Helsham, were evidently quite authentic, as the bird was flushed off the egg, and several specimens shot by myself at the time. The Gootchy eggs are smaller than the

present specimen, but slightly larger than those of *E. guttatus*. The egg at present under consideration in size is almost as large as that of *Podargus humeralis*. The egg from Gootchy is 1.53×1.05 inch; colour light cream with black round dots. That received from Mr. A. Clarke, is of a rich deep cream-yellow, having on one side a cluster of round black spots, which touch one another here and there, and a few similar dots sprinkled over the remaining surface; length 1.55 inches \times 1.15 inches in breadth. In consequence of the great width of the egg it appears to be larger than it really is.

SPHENURA LONGIROSTRIS, *Gould.*

Ground-colour whitish, spotted freckled and dotted all over, but more closely on the thicker end, with dark wood-brown. Length 0.9 inch \times 0.72 inch. Taken by Mr. George Masters at King George's Sound, West Australia.

AMYTIS STRIATUS, *Gould.*

The eggs of this species closely resemble those of *Ptenoedus rufescens*. The ground-colour is white, almost obscured towards the thicker end with freckles and dots, forming confluent spots of rich red; in some forming a zone, in others extending in an irregular patch over the end. Length 0.85×0.65 inch. Taken by Mr. K. H. Bennett at Mossgiel.

RHIPIDURA SETOSA, *Quoy et Gaim.*

Similar to that of *R. motacilloides*, but much smaller. It is of a light cream colour, with dull wood-brown spots forming a zone at the larger end. Length 0.68×0.55 inch. Taken by Mr. Alex. Morton at Port Darwin. Other specimens similar, but with larger and better defined markings have recently been received from Mr. T. H. Boyer-Bower, from Derby.

RHIPIDURA RUFIFRONS, *Lath.*

This species, although a constant visitor to Sydney and the neighbourhood, seldom breeds except in the thick brushes of Illawarra, or such-like localities. The eggs are two for a sitting, of a pale cream colour, or creamy white, with a zone of spots and

dots of light wood-brown, and a few dots of lilac, the markings being confined to the zone, with the exception of one or two large dots on the remainder of the surface. Length 0.7×0.52 inch. (From Mr. Ralph Hargrave's Coll.)

PIEZORHYNCHUS ALBIVENTRIS, Gould.

Monarcha albiventris, Gould, *Supp. Bds. Aust. pl.* 13.

From the British Museum Catalogue of Birds, Vol. IV., pp. 418-19, I gather that the true *Piezorhynchus trivirgata* of Temminck is not found in Australia, and that the bird figured by Gould under this name must therefore be a distinct species, which Mr Sharpe names *P. gouldii*. Against this I have nothing to say, but it may be as well to remark that the bird which we recognise here as Gould's *P. trivirgata*, viz., Sharpe's *P. gouldii*, is not the same as the white-bellied species *P. albiventris* of Mr. Gould, nor is it found farther north, as far as I know, than the Burnett and Burdekin Rivers, but it is found as far south as the Hunter; and I have eggs taken by Macgillivray on the Clarence River. I also met with it on the Richmond River. I hold that Gould's *P. albiventris* is a good species confined to the north, and quite distinct from its southern representative in N.S.W., *P. gouldii*.

Having previously described the nest and eggs of *P. gouldii*, Sharpe, (*Monarcha trivirgata*, of Gould), and of *Monarcha melanopsis*, Vieill. (*M. carinata*, V. and H., Gould's Bds. Aust., pl. 65), I need only mention that these descriptions will be found in the *Ibis*; of the former, *M. trivirgata* of Gould, in *Ibis*, Vol. IV., n. s. 1868, p. 271, and of the latter, *M. carinata*, in the *Ibis*, 1865, Vol. I. n. s., p. 302.

The nest of *P. albiventris* is similar in every respect to that of *Monarcha melanopsis*, Vieill., only slightly smaller, and the eggs of the several species are scarcely to be distinguished from one another except by their size. Those of *P. albiventris*, Gould, measure 0.8 in length \times 0.56 inch. The ground-colour is white, the whole surface being sprinkled over with freckles and dots of bright red, which becoming confluent near the thicker end, there form a zone.

PÆCILODRYAS SUPERCILIOSA, *Gould.*

The nest of this species somewhat resembles that of an *Eöpsaltria*. The eggs also resemble those of *E. australis* (Lath.), but are much smaller. The ground-colour is of a rich apple-green, but in some of a bluish tint; some are zoned and sprinkled with spots, others have irregular or confluent blotches of reddish brown. Two eggs are considered by this bird sufficient for a sitting. Length (A) 0·78 × 0·56 inch; (B) 0·8 × 0·55 inch; (C) 0·77 × 0·57 inch; (D) 0·9 × 0·55 inch, this last being an elongated abnormal specimen. They were taken, and the birds shot by Mr. Ed. Spalding at Rockingham Bay in 1868.

EOPSALTRIA GULARIS, *Quoy et Gaim.*

E. griseogularis, Gould, Handbook, sp. 176.

Eggs, two or three for a sitting. The ground-colour is of a pale apple-green, with a zone of dots and spots round the larger end of a light reddish-brown; they approach in tint faded eggs of *E. nana*, Ramsay, but are much larger. Length 0·83 × 0·6 inch. Taken by Mr. George Masters at King George's Sound, West Australia.

MALURUS MELANOTUS, *Gould.*

Eggs like those of *M. cyaneus*, from which they are not to be distinguished; white, with rich red dots, spots, and in some, blotches scattered all over the surface, crowded on one end, or forming a broken zone near the thicker end; the size of an average specimen is—long axis, 0·63 inch; short axis, 0·48 inch; of a heavily blotched specimen, 0·65 × 0·45. (*Dobr. Mus. Coll.*)

MALURUS CALLAINUS, *Gould.*

This wren, one of the latest species described by Mr. Gould, is far from rare in the interior, my brother Mr. James Ramsay having no difficulty in obtaining as many specimens as I required during one season, both of its nests and eggs, with the birds shot therefrom. Although the eggs appear quite different from those of

other species of the genus, still it is difficult to express these differences in a description. Eggs white or pinkish white, with minute dots and small spots of rich red sprinkled over the whole surface, in some forming zones, in others blotches. What I consider the more typical eggs of this species, are those with a few dots of dark red sparingly sprinkled over the whole surface of the shell, closer together on the thicker end, but seldom forming a distinct zone ; all more or less pointed ; (1), 0.67×0.48 inch ; (2), 0.67×0.48 inch : (3), 0.66×0.48 inch. (*J. R., Dobr. Mus.*)

MALURUS LAMBERTI.

The eggs of this species cannot be distinguished from those of *M. cyaneus* or many others of the genus ; two of this species before me are heavily blotched with red, forming a zone on the thicker end ; another has the spots smaller and sprinkled over the whole surface. Length (1), 0.64×0.48 inch ; (2), 0.65×0.47 inch.

FALCUNCULUS FRONTATUS, *Lath.*

Although this species breeds freely in the neighbourhood of Sydney, its nest is seldom met with, and its eggs are still rarer. This arises chiefly from the inaccessible places in which the birds build, the very tops of the tall Eucalypti, so that even when found, they are seldom procurable.

The nest is a deep cup-shaped structure of fine shreds of bark strongly woven together, and strengthened with cobweb, and lined with grasses.

The eggs, seldom three in number, resemble those of *Myiagra nitida*, but are more elongated ; white with a few dots of greyish lilac and slaty black sprinkled over the surface, but in some crowded on the thicker end, where some are confluent, forming spots or irregular short linear markings. Length (A) 0.9×0.65 inch (Dr. Hurst's, Coll.) ; (B) 0.85×0.63 inch ; (C) 0.92×0.64 inch ; B and C have no irregular markings on the shell, merely a few minute dots almost black. A description of the egg of *Falcunculus leucogaster* will be found in Gould's "Handbook to the Birds of Australia," I. p. 230.

GEOCICHLA MACRORHYNCHA, *Gould.*

The nest and eggs very much the same as those of *G. lunulata*, Lath., but are larger; the eggs are three for a sitting, of a greenish white, strongly freckled all over but more numerous at the larger end with rich reddish-brown; some confluent markings take a longitudinal direction or run obliquely with the long axis of the egg. An average specimen measures 1.33 inches in length \times 0.95 inch through its short diameter.

AMADINA MODESTA, *Gould.*

During the years 1863 to 1866, this species, from a few pairs of escaped birds, had bred and multiplied considerably in the neighbourhood of Eastern Creek and Blacktown, &c. They also appeared on the Bell River, near Cardington, where several nests were taken by my brother, Mr. J. S. Ramsay, 24th December, 1869. Nests like all others of the genus, and the eggs white, 4 or 5 for a sitting, roundish; in length 0.6 \times 0.46 inch; 0.57 \times 0.54 inch; 0.6 \times 0.5 inch; 0.6 \times 0.5 inch.

DONACICOLA CASTANEOTHORAX, *Gould.*

This species is widely distributed over the whole of N. S. Wales and Queensland. It breeds plentifully in the extensive grass-beds of the Clarence and Richmond River districts, also at Maryborough, Q. Eggs five seldom four, white; length 0.64 \times 0.48 inch; 0.65 \times 0.48 inch; 0.67 \times 0.5 inch; two other eggs from same nest are slightly smaller. Taken at Indah, Mary River, 19/2/72.

POEPHILA CINCTA, *Gould.*

This species was formerly abundant in the neighbourhood of Rockhampton, but during my visit to those parts in 1869-70, not a specimen could be found, the bird having been entirely exterminated by the "trappers," for the European markets. It is thinly

dispersed over the country to the north, but is replaced in the Gulf districts by its near ally *P. atropygialis*. It nests in the long grass and Pandanus bushes. Lays five eggs of a bluish white, elongated in form. Length 0.7×0.48 inch; 0.72×0.5 inch. We have at present, among others, both *P. cincta* and *P. longicauda* breeding in our aviaries.

POEPHILA GOULDIÆ, *Gould.*

This species and the one known as *P. mirabilis* have been found breeding in company upon numerous occasions. Both are plentiful inland from the Gulf district to Derby in West Australia. The nest is similar to others of the genus, composed of dry grasses without any other lining. The eggs are white, slightly pyriform in shape. Length (1) 0.64×0.49 inch; (2) 1.65×0.5 inch. Five are laid for a sitting. (From Dr. Hurst's Coll.)

ESTRELLA PHAETON, *Homb. et Jacq.*

The eggs here described were taken by Mr. J. Rainbird in 1864, from some of the nests at that time common on extensive grass lands near Port Denison. The nest is like all others of the family, a flask-shaped structure of grasses, with a long narrow entrance, placed on its side in any convenient place, either in Pandanus trees or adjacent shrubs, or among the stronger of the grass stems.

The eggs, 4 or 5 for a sitting, are small in comparison with the size of the birds; length 0.65×0.45 inch in breadth.

ORTHONYX TEMMINCKII, *Vig. and Horsf.*

O. spinicaudus, *Temm.*

Mr. Gould in his Handbook has already described the nest of this species, which is usually known under the name of *O. spinicaudus*. Nests obtained by my collectors in the Richmond River scrubs in 1865-6, were all placed on the ground at the base or between the "buttresses" of trees, and composed of mosses and débris of leaves, &c. Eggs white, large comparatively, 1.13×0.35 inch.

SITELLA TENUIROSTRIS, *Gould.*

This is a somewhat doubtful species, and Dr. Gadow, who has presumably examined the type from Mr. Gould's collection, has made it still more doubtful by placing it as identical with *Sittella pileata*; but on reference to Mr. Gould's Handbook, Vol. I. p. 610. it will be seen that that author considered the bird a variety of *S. chrysoptera*.

As I have specimens agreeing very well with Mr. Gould's description, from the interior provinces, obtained by Mr. James Ramsay, I prefer to consider it more nearly allied to *S. chrysoptera* than to any other. The length of the bill is 0·7 inch. The nest is a very beautiful structure placed between the upright forks of often a dead branch; it is very deep, open above, the edges sharp not rounded, and composed of fine shreds of bark, lichens and cobweb, the outside felted or "shingled" with small scales of bark fastened on with cobwebs, and made to so resemble the sides of the forked branch between which it is placed, as to be most difficult of detection; the interior is usually lined with "mouse-eared" lichen, and the colour of the eggs closely resembles that of the lichen itself. The eggs are 3, seldom 4 in number, of a delicate greenish white, with dots and confluent irregular markings of slaty-lilac, and slate-black, the lilac freckles appearing beneath the shell; in some forming a zone of larger spots near the thicker end, in others the spots are nearly evenly dispersed over the whole surface. Length (A) 0·63 × 0·55; (B) 0·68 × 0·55; (C) 0·66 × 0·53; (D) 0·62 × 0·52 inch.

CLIMACTERIS ERYTHROPS, *Gould.*

I am indebted to Mr. K. H. Bennett, of Mossgiel, for a fine set of the eggs of this species, the first I had seen; they closely resemble some of the varieties of those of *Ptenædus rufescens*, but have a climacterine look about them, and a smooth shell. The ground-colour, apparently white, is obscured with evenly dispersed dots and freckles of a rich red, which, occasionally confluent, form elongated spots here and there; some have a zone formed by

confluent spots of red intermixed with slate or lilac-brown, and here the spots are largest, and the lilac marks appear beneath the shell. The following are the measurements of a set—(A) 0.83 × 0.65 inch ; (B) 0.85 × 0.63 inch ; (C) 0.82 × 0.63 inch.

While about it, I may as well make some remarks on *Climacteris leucophaea*, Lath., *Climacteris scandens*, Temm., and *Climacteris pyrrhonota*, Gould.

Recently on consulting the British Museum Catalogue of Birds, Vol. VIII., I was greatly surprised to find the female of *C. leucophaea* described as that of *C. scandens*, and *vice-versa* ; how such a mistake crept in it is hard to imagine. I should also like to ask the learned author of this volume how "*Glyciphila ocellaris*, Gould, P.Z.S., 1837, p. 154," becomes a synonym of *C. leucophaea*. (See Cat. Bds., p. 336, Vol. VIII.)

Moreover under *C. scandens* (p. 337) the female of *C. leucophaea* is described. The sexes of *C. scandens* differ in plumage only in the *markings on the chest*, and in this respect they resemble *C. melanura*, Gould, *C. erythroptis*, Gould, *C. melanota*, Gould, and *C. rufa*, Gould. But *C. leucophaea* and *C. pyrrhonota* belong to another section of the genus. *C. pyrrhonota* the first specimen of which I shot and skinned at Springfield, near Goulburn, in January, 1865, is closely allied, *if not identical* with *C. leucophaea* ; it has nothing to do with, nor does it in any way resemble *C. scandens*. For the present I shall say no more as it is my intention to revise the synonymy of this genus hereafter.

PTILOTIS NOTATA, Gould.

The eggs of this species are very similar to those of the other members of the genus, being of a pinkish white ground-colour, with rich dark spots on the thicker end, some confluent, forming blotches larger than usual. They come nearest to those of *Ptilotis auricomis*, and measure (A) 0.9 × 0.65 inch ; (B) 0.91 inch × 0.64 inch. Taken by Mr. Boyer-Bower near Cairns, Q.

MYZOMELA NIGRA, *Gould.*

The nest is a shallow cup-shaped structure of fine shreds of bark or similar material, usually placed over a horizontal fork of a branch. Mr. K. H. Bennett informs me that some years ago this species was found plentifully near Mossgiel feeding in the Sandalwood trees, (*Myoporum platycarpum*).

Eggs two for a sitting; they are of a dull white or cream-white with an indistinct zone, which in some consists of distinct dots of dull brown near the thicker end, in others clouded markings of light brown. Length (A) 0·6 inch \times 0·47 inch; (B) 0·63 inch \times 0·48 inch.

PTILOPUS SUPERBUS, *Temm.*

The egg of this fruit-dove is remarkably small, in comparison with eggs of other pigeons of a similar size. I have received a specimen taken by Mr. Boyer-Bower in the brushes near Cairns, Queensland, and although I may have previously described the egg of this species taken out of Australia, I think it not out of place to give a description of a truly authentic Australian specimen. Eggs white, oval, rather elongated and pointed, 1·2 \times 0·83 inch; two only are laid for one sitting.

ANAS GIBBERIFRONS, *Müll.*

There has been much discussion about this species which had always been looked upon in Australia until the last few years, as the female of *A. castanea* (*A. punctata*, of Gould's Bds. Aust.)

I have not been able to find any good characteristics between the females of these species up to the present time. But the males may at once be known, as in *A. gibberifrons*, the sexes are alike in plumage; in *A. castanea* the male has a rich chesnut-red breast and a glossy green head when adult, and even in the young male the chest is tinged with rufous. The eggs are usually 6 to 10 in number, and are laid in the hollow branches of trees, &c. Creamy white. Length 2·15 \times 1·45 inches. The eggs of *A. castanea*, Eyton, are similar in size and colour.

ANAS SUPERCILIOSA, *Gmel.*

The eggs of this species vary in number from 6 to 10 for a sitting. The nest is often placed at some distance from the water among herbage on the ground, which hides the bird from view when sitting. Often a small "run" through the long grass and herbs leads to the nest itself. A great variety of situations is chosen for the nest, and the eggs are always covered over with down and feathers of the parent bird when she leaves the nest. The colour is a pale cream tint, sometimes with a greenish shade. One egg I have seen has a round green spot, but this must be looked upon as quite accidental. Average length 2.2 by 1.9 inches in breadth. (*Note-book*, 1880-1, p. 4.)

EXPLANATION OF PLATE XIX.

EGGS OF AUSTRALIAN BIRDS.

- Fig. 1.—Egg of *Chlamydodera maculata*.
 Fig. 2.— „ *Ptilonorhynchus violaceus*.
 Fig. 3.— „ *Pachycephala gutturalis*, showing a double band of spots caused by retention in the oviduct.
 Fig. 4.— „ *Sericulus melinus*.
 Fig. 5.— „ *Pachycephala gilberti*.
 Fig. 6.— „ *Ailurædus crassirostris*.